

SECTION 16 - TRAINING

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Synopsis

NOTE: This section is promulgated to ensure that all National Weather Service (NWS) facilities and work sites establish and implement training programs required under environmental programs. It summarizes each applicable law and details the employee training required by the regulations promulgated under the authority of the law.

The section applies to all NWS facilities and work sites.

Initial Implementation Requirements:

Compare Site/Facility Operations with the Requirements of this Section

- Determine which environmental programs affect operation of the facility or work site
- Determine the training required
- Provide the required training

Recurring and Annual Task Requirements:

Provide Refresher Training, as required.

Training Checklist	YES	NO	N/A
Does the facility or work site:			
a. Generate and handle hazardous and/or Universal waste	—	—	—
b. Have a Spill Prevention, Control, and Countermeasure (SPCC) Plan	—	—	—
c. Have lead-based paint in housing units	—	—	—
d. Store flammable materials	—	—	—
e. Use aboveground storage tanks	—	—	—
f. Use an underground storage tank	—	—	—
g. Have employees who:			
• Remove lead-based paint	—	—	—
• Remove asbestos	—	—	—
• Maintain HVAC	—	—	—
• Apply pesticides	—	—	—
• Use OSHA-defined hazardous chemicals	—	—	—
• Respond to spills of hazardous materials	—	—	—
• Specify or apply labels, markings or containers for shipments of hazardous materials	—	—	—

NOTE: If the correct answer results in an “x” in a boxed area, specific employee training is required.

SECTION 16 TRAINING

16.1 Purpose and Scope

This section is promulgated to ensure that the employee training required under numerous environmental programs is established and implemented at all NWS facilities and worksites.

16.2 Definitions

Asbestos-Containing Material	Any material that contains more than 1% asbestos.
HAZMAT Employee	A person who “in the course of employment, affects hazardous materials safety.”
Operating Unit	Includes the National Centers for Environmental Prediction (NCEP), National Data Buoy Center (NDBC), NWS Training Center (NWSTC), National Reconditioning Center (NRC), National Logistics Support Center (NLSC), Radar Operations Center (ROC) or the Sterling Field Support Center (SFSC).
Station Manager	For the purpose of this procedure, the Station Manager shall be either the NWS Regional Director; NCEP Director; Directors of Centers under NCEP (Aviation Weather Center, NP6; Storm Prediction Center, NP7; Tropical Prediction Center, NP8, and Space Weather Prediction Center, NP9); Directors of the NDBC, NWSTC, and Chiefs of NRC, ROC and SFSC facilities; or Meteorologist in Charge (MIC), Hydrologist in Charge (HIC), or Official in Charge (OIC).

16.3 Acronyms Employed in This Section

ACM	Asbestos Containing Materials
AHERA	Asbestos Hazard Emergency Response Act
CDL	Commercial Driver’s License
CESQG	Conditionally Exempt Small Quantity Generator
CFC	Chlorofluorocarbons
CPSC	Consumer Product Safety Commission
DOT	Department of Transportation
DRO	Designated Responsible Official
EPA	Environmental Protection Agency
HAZCOM	Hazard Communication
HAZMAT	Hazardous Material
HAZWOPER	Hazardous Waste Operations and Emergency Response
LQG	Large Quantity Generator
SECO	NOAA Safety and Environmental Compliance Office
NLIC	National Lead Information Clearinghouse

NOAA	National Oceanic & Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NWS	National Weather Service
NWSH	National Weather Service Headquarters
PACM	Presumed Asbestos Containing Material
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
OSHA	Occupational Safety and Health Administration
RCR	Resource Conservation and Recovery Act
SDS	Safety Data Sheet (formerly MSDS)
SPCC	Spill Prevention, Control, & Countermeasure
SQG	Small Quantity Generator
TSI	Thermal System Insulation
UST	Underground Storage Tank

16.4 Regulatory Requirements

16.4.1 Federal

Employee training for environmental programs is mandated by the Environmental Protection Agency (EPA), as well as by the Occupational Safety and Health Administration (OSHA) and the Department of Transportation (DOT).

The Federal laws, which authorize these agencies to require the training, include:

- a. **Federal Insecticide, Fungicide and Rodenticide Act of 1947** – Under this law, the EPA requires applicators be trained and certified in the proper storage, use and disposal of pesticides. While this training is usually only required for commercial applicators, some States require it for applications of over-the-counter products.
- b. **Occupational Safety and Health Act of 1970** – This law empowers OSHA to require training for employees when managing and working with hazardous chemicals. As a result, OSHA has a number of requirements for training programs, including the Hazard Communication Standard, the storage of flammable liquids, as well as those that are limited in scope, such as asbestos worker, lead-based paint worker, or confined space entry training.
- c. **Clean Water Act of 1972** – The Clean Water Act of 1972 and its amendments in 1977 and 1987 empowered the EPA to create a National Pollutant Discharge Elimination System (NPDES) Program to protect the nation's water. Under this program, the EPA required the use of Spill Prevention, Control, and Countermeasure (SPCC) plans to prevent and contain releases of petroleum products from storage tanks. The SPCC Plans rely on employees' training to ensure the structures and programs described in the SPCC Plan are operational.

In addition, because the NPDES Program requires permits be obtained for the discharge of water, additional training may be specified as part of a discharge permit.

- d. **Clean Air Act of 1990** – The Clean Air Act of 1990 authorized the EPA to create a regulatory program that includes training for and certification of all employees who repair refrigeration systems that contain chlorofluorocarbons (CFCs) as well as those who remove

asbestos or ACM. The EPA also requires training for employees who perform maintenance and repair of petroleum tank venting systems.

- e. **Hazardous Materials Transportation Uniform Safety Act of 1990** – The Hazardous Materials Transportation Uniform Safety Act of 1990 authorized the DOT to require training for all employees who affect the safety of a hazardous material while in transport. By definition, anyone who packages, labels, marks or even signs a shipping paper is a DOT HAZMAT employee and must be trained.
- f. **Toxic Substance Control Act of 1976** – The Toxic Substance Control Act of 1976 authorized the EPA to implement the Model Accreditation Plan (MAP), which set minimum training standards for personnel engaged in asbestos abatement. The EPA has also used this law to authorize required training for workers who remove lead-based paint.
- g. **Resource Conservation and Recovery Act of 1976** – The Resource Conservation and Recovery Act of 1976 authorized the EPA to create the national hazardous waste management program which included requirements for training all employees who generate, store, dispose, or otherwise manage hazardous waste.
- h. **Hazardous and Solid Waste Amendments of 1984** – The Hazardous and Solid Waste Amendments of 1984 required the EPA to establish a program to address underground storage tanks. As part of this program, the EPA required the training of employees in the use and maintenance of underground storage tanks and their protective systems.
- i. **Superfund Amendments and Reauthorization Act of 1986** – The Superfund Amendments and Reauthorization Act of 1986 required OSHA to address the topic of worker safety at Superfund sites. Because of this legislation, OSHA created the Hazardous Waste Operations and Emergency Response (HAZWOPER) program, which includes specific training requirements for employees who respond to spills of hazardous materials.

16.4.2 State and Local

Because the States have been authorized by the EPA to manage many of these Federal Environmental Programs within their borders, State environmental regulations must be consulted to determine the requirements for a specific NWS facility or work site. The NWS Regional/Operating Unit Environmental Coordinator and/or NWSH environmental/safety staff should be consulted to determine if State or local rules are applicable. In addition, because many States have created programs which augment and/or replace OSHA programs, the State worker safety regulations must also be consulted.

This is not the case in the area of hazardous materials transportation. Because the States are discouraged by Congress from creating separate rules for the transportation of hazardous materials the U.S. DOT requirements are universally applied throughout the U.S. and thus the DOT regulations for training of HAZMAT employees are the only requirements for this area.

16.5 NOAA Training Programs

The annual NOAA Safety, Environmental, and Sustainability Awareness course is currently required for new NOAA employees and may be used as a refresher by all other employees who previously completed the course. The course is available at:

<https://doc.csod.com/LMS/LoDetails/DetailsLo.aspx?loid=a3edc2bf-1485-4a6a-82bf-59d4c7e6af07#t=1>

16.6 NWS Training Programs

Based on their operations and the applicable laws and regulations, NWS facilities and work sites are required to create and implement employee training programs for the following activities, if applicable:

- a. Hazardous and Universal waste generators
- b. Spill Prevention Control and Countermeasures plan (SPCC plan) and inspection, testing and operation of aboveground storage tanks
- c. Lead-based paint in NWS housing
- d. Asbestos removal
- e. Maintenance of air conditioning systems
- f. Application of pesticides
- g. Use of hazardous chemicals (HAZCOM Standard)
- h. Storage of flammable materials
- i. Response to spills of hazardous materials (HAZWOPER Standard)
- j. Underground storage tank management
- k. DOT Hazardous Materials transportation

In addition, should an NWS facility or work site be granted a permit for air emissions or the discharge of wastewater, there may be additional training required as a permit condition.

16.6.1 Training Required for Hazardous Waste Generators

Employees at NWS facilities or work sites that generate and store (or accumulate) hazardous waste are required to be trained if they are involved in the generation, accumulation, packaging, labeling or transportation of the waste off-site. The amount and type of training required is in large part determined by the amount of hazardous waste generated at the site and what is done with it.

The EPA defines four types of hazardous waste generators and each has different training requirements:

- A Large Quantity Generator (LQG) produces more than 1,000 kilograms per calendar month or more than 1 kilogram per month of acutely hazardous waste.
- Small Quantity Generator (SQG) that produces less than 1,000 kilograms, but more than 100 kilograms and less than 1 kilogram per month of acutely hazardous waste.
- A Very Small Quantity Generator (VSQG) that produces less than 100 kilograms per month
- A generator that only accumulates universal wastes that are being recycled.

NOTE: The determination of the quantity of hazardous waste generated is based on location not organization. If a NWS facility or work site that generates less than 100 kilograms per month of hazardous waste is co-located with other agencies on a site where the aggregate of all the hazardous waste generated exceeds the 1,000-kilogram level, the NWS facility or work site is a large quantity generator.

a. Large Quantity Generator Training Requirements

Currently, the EPA regulations require a formal, written program, which is designed to ensure that all facility personnel involved in hazardous waste management are taught to perform their jobs to ensure compliance with the hazardous waste regulations. This means employees must be taught why a waste is considered “hazardous” and how to handle, label, mark and store it properly as they do their work. The training may be administered in a classroom or on-the-job.

The training program must be directed by a “person trained in hazardous waste management procedures.” The material for instruction must include those job-specific procedures that each individual needs to perform their job.

1) **Minimum Requirements**

The EPA requires employees who handle a hazardous waste be trained to properly manage that hazardous waste as they perform their jobs. In addition, the EPA and OSHA require the employees be taught how to prepare for and respond to emergency involving hazardous wastes. At a minimum, this training will involve a review of the pertinent sections of the facility/work site Occupant Emergency Plan developed in accordance with Procedure 5 of NWSM50-1115 - Occupational Safety and Health Manual. It must also include repair and replacement of equipment needed during emergency as well as immediate response procedures such as emergency reporting procedures, use of the alarm/communication system and employee evacuation procedures.

2) **Compliance Dates:** The training must be provided within six months of hire or promotion or transfer.

3) **Retraining and Recordkeeping**

a) **Retraining Required:** annual refresher of initial training

b) **Records:** the program must consist of several written records: a job title, a job description, the amount and type of training required and documentation that the training was provided.

Job Title - While the job titles can be those already used by an organization and/or incorporated into a collective bargaining agreement, they do not have to be. In fact, it is better if these titles only refer to a person’s specific hazardous waste duties and not to any of their other duties. For example, the hazardous waste job title “Satellite Accumulation Operator” could be given to an employee who is in charge of the satellite accumulation areas but who holds another title that describes his/her primary duty, such as the Electronics Technician or Data Acquisition Program Manager. While each of these individuals has different primary duties, for the purposes of the hazardous waste training program job titles

they would be identical.

Job Description - For each hazardous waste job title, a description of what is required of that individual must be prepared. Remember, only one job description is needed for each job title. The description must include the duties or responsibilities for that title and the qualifications needed to properly fulfill those responsibilities.

Training Needed - Based on the job description, a document must be prepared which describes the type and amount of training required to ensure they can perform their duties as detailed in the job description. These records must include the training required initially upon job assignment as well as that necessary for the annual refresher.

Training Records - The records documenting the fact that training was completed must be kept for 3 years after an employee leaves or is transferred.

4) Regulatory Citation

40 CFR 262.34 which references 40 CFR 265.16

29 CFR 1910.120(p) (8) (iii)

b. Small Quantity Generator Training

- 1) Generators who produce more than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month are required to provide training to “ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.”

This training must include:

- a) Identification of hazardous wastes generated at the facility
- b) Techniques for packaging, marking, labeling
- c) Accumulation (storage) procedures
- d) Emergency response procedures involving the waste
- e) Internal notification or recordkeeping procedures, which allow accountability of the waste.

- 2) Compliance Dates

The EPA does not specify how long this training should take nor when it must be provided. Best management practices, however, would suggest this training be provided before an employee handles a hazardous waste.

- 3) Retraining

The EPA does not require retraining, but a review every two years at a minimum is suggested.

c. Very Small Quantity Generator Training Requirements

- 1) Requirements

For generators who produce less than 100 kg per month of hazardous waste, the EPA has no specific training requirements, however, “best management practices” require employees are provided training in:

- a) How to manage any hazardous waste they generate, transport or store
- b) How to respond to emergencies involving the hazardous waste

2) Compliance Dates

The EPA does not specify how long this training should take nor when it must be provided. Best management practices, however, would suggest this training be provided before an employee handles a hazardous waste.

- 3) Retraining: The EPA does not require retraining but a review every two years at a minimum is suggested.

d. A Small Quantity Universal Waste Handler

Generators of hazardous waste that meet the requirements for universal wastes if recycled are also required to provide training for their employees. The list of universal wastes includes:

- a) Batteries
- b) Pesticides
- c) Mercury-containing equipment
- d) Lamps, including fluorescent bulbs

If an NWS facility or work site only generates universal wastes and accumulates a total of less than 5,000 kilograms (11,023 pounds) of these wastes before transporting to a recycling facility, then the facility is a “small quantity handler” (SQH) of universal waste. The NWS employees who manage or store these wastes must receive training on the proper handling of the wastes and the appropriate emergency procedures to be used in the event of breakage, leak, fire or other emergency.

16.6.2 Training Required by the Spill Prevention, Control, and Countermeasure (SPCC) Plan

1. Training Requirements

If an NWS facility is required to have an SPCC Plan, the EPA requires the training program to ensure facility personnel understand the operation and maintenance of the equipment described in the SPCC Plan to ensure discharges of oil are prevented and personnel know how to respond if a spill should occur.

OSHA has a training requirement for employees who respond to releases of petroleum products under the Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements in 29 CFR 1910.120q. Employees who only respond in a defensive fashion (i.e., use sorbent to absorb a spill) without actually trying to stop the release are deemed First Responder Operations Level. These employees must receive at least eight hours of training or be certified by the employer (i.e. the Station Manager) that they “have sufficient experience to objectively demonstrate competency.”

NOTE: For employees who only respond to releases of diesel oil, successful completion of the EPA-required SPCC training will allow the Station Manager to make the necessary certification negating the need for the OSHA 8-hour training course. The template for SPCC training is posted at OPS1 environmental/safety web page:

https://www.ops1.nws.noaa.gov/Secure/env_new.htm (under “Environmental Compliance”).

Under the EPA rules for oil pollution prevention and response, all aboveground tanks used for bulk storage of petroleum products must be subject to periodic testing to ensure they are not leaking. For the ConVault tanks used by the NWS, this inspection requires the inspectors be trained in:

- What to look for when visually inspecting the outer shell and diking
- How to test the operation of the interstitial monitoring device

There is no regulatory requirement for retraining, but an annual review is recommended

b. Retraining

Discharge prevention briefings for oil-handling personnel must be conducted at least once a year to ensure adequate understanding of the SPCC Plan for the facility.

c. Regulatory Citation: 40 CFR 112.7(f)

16.6.3 Lead-Based Paint (LBP) in Housing

- a. For NWS employees and their families who live in NWS-provided housing containing lead-based paint, the NWS Lead-Based Paint Program Manager must provide information detailing the known lead-based paint hazards and a pamphlet developed by the EPA, U.S. Department of Housing and Urban Development (HUD), and the Consumer Product Safety Commission (CPSC) titled, “Protect Your Family From Lead in Your Home.”

NOTE: The sample disclosure forms and the pamphlet, “Protect Your Family From Lead in Your Home” can be obtained by calling the National Lead Information Center (NLIC) at (800) 424LEAD (800-424-5323). A request may also be made by FAX to (202) 659-1192 or by e-mail to ehc@cais.comail. Forms and disclosure can also be found at this link:

<https://www.epa.gov/lead/protect-your-family-lead-your-home-real-estate-disclosure>

b. Retraining:

There is a one-time notification to each resident.

c. Regulatory Citation: 40 CFR Part 745.107

16.6. 4 Asbestos Training

a. General Requirements

OSHA requires asbestos training for all employees who either work with asbestos-containing material (ACM) or, because of where they work, could be exposed to a concentration of asbestos in excess of the permissible exposure limit (PEL) of 0.1 fiber per cubic centimeter in air. This training must be completed before or at the time of initial exposure and the NWS must provide written materials at no cost to the employee.

In addition to the levels of work divided by class of work, OSHA requires all employers to provide employees who perform housekeeping operations in an area which contains ACM or presumed asbestos-containing material (PACM) an asbestos awareness training course. The subject material is the same as EPA's Asbestos Hazard Emergency Response Act (AHERA) training requirements for a two hour class (40 CFR 763.92 a (1)) for custodial and maintenance employees. Since NWS employees may also perform maintenance or installation of equipment in areas where asbestos may be located, they should complete the training and topics discussed in these standards. Each such employee shall be so trained at least once a year.

OSHA divides the types of work with asbestos into four classes and requires training appropriate to each class of work. The four OSHA classes are:

- 1) **Class I asbestos work** means activities involving the removal of Thermal System Insulation (TSI) and surfacing ACM or PACM.
- 2) **Class II asbestos work** means activities involving the removal of ACM, which is not thermal system insulation, or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles and construction mastics.
- 3) **Class III asbestos work** means repair and maintenance operations where ACM, including TSI and surfacing ACM and PACM is likely to be disturbed.
- 4) **Class IV asbestos work** means maintenance and custodial activities during which employees come into contact with, but do not disturb ACM or PACM and activities to cleanup dust, waste and debris resulting from Class I, II and III activities.

NOTE: Under this system, the drilling into the asbestos siding on the home of a COOP to install a piece of equipment would classify as Class III work.

The OSHA regulations include a provision that if the competent person determines that much of the EPA curriculum for operation and maintenance workers is not relevant, this person may certify that training contained in CFR 1926 1101 k (9) viii is more applicable and may choose to designate this training appropriate for Class III workers. This can be done if all relevant engineering and work practice controls, other controls and "hands on training" will be adequately covered. The duration of initial training will depend on the complexity and hazards of operations, but it is likely that at least four hours will be required to cover all topics.

16.6.5 Air Conditioning Systems Maintenance

NWS employees who maintain, service or repair refrigerators, freezers, air conditioners, heat pumps, dehumidifiers, water coolers and other appliances that use refrigerant must be certified by the EPA. Depending on what the employee repairs, the certification and requirements vary.

Type I	Technician	Maintains, repairs or services small appliances
Type II	Technician	Maintains, repairs or services high-pressure appliances, motor vehicles or motor vehicle-like appliances
Type III	Technician	Maintains, services, repairs or disposes of low pressure

appliances.

A Universal Technician maintains or services both high and low pressure systems.

To be certified, a technician must take and pass a test provided by the EPA for the appropriate type of technician. To take the test, the Regional EPA office must be contacted and arrangements made.

The training to obtain the certification is “hands-on” training. While an employee is undergoing training, the employee is deemed an “apprentice.” Apprentices are allowed to work on appliances as long as they are “closely and continually supervised by a certified technician while performing any maintenance, service, repair or disposal that could reasonably be expected to release refrigerant from the appliances to the environment.” Once the apprentice is trained, contact with the EPA Regional Office must be made to arrange for the certification testing.

- a. Retraining: The EPA does not require retraining, but does allow the EPA Administrator to require re-certification by placing a notice in the Federal Register.
- b. Regulatory Citation: 40 CFR Part 82.40 and 40 CFR Part 82.161

16.6.6 Pesticide Applicator Training

EPA regulations require pesticide applicators to be certified as competent to apply restricted use pesticides in accordance with national standards. The actual certification of applicators, however, is done by the States, Territories and Tribes in accordance with these standards. The training covers safe pesticide use as well as environmental issues such as endangered species and water quality protection.

NOTE: NWS employees using off the shelf pesticides such as wasp and mosquito sprays are not required to be certified.

The EPA regulations classify applicators as either private or commercial and then promulgate separate standards for each.

A *private applicator* uses or supervises the use of restricted use pesticides for producing an agricultural commodity. This activity may occur on property owned or rented by the applicator or the applicator’s employer, or, if applied without compensation other than the trading of personal services between products of agricultural commodities, on the property of another person.

A *commercial applicator* uses or supervises the use of restricted use pesticides for any purpose or on any property not covered by private applicators.

Because State, Territory, or Tribal rules may modify these definitions, NWS facilities need to check with the NWS Regional/Operating Unit Environmental/Safety Coordinator or NWSH environmental and safety staff to determine the applicable State rules.

Under the EPA guidelines, commercial applicators must demonstrate practical knowledge of the principles and practices of pest control and the safe use of pesticides. Competence must be determined by a written exam and, as appropriate, performance testing in the following areas:

- a. Label and labeling comprehension

- b. Safety
- c. Environment
- d. Pests
- e. Pesticides
- f. Equipment
- g. Application technique
- h. Laws and regulations

In addition, tests are given on the particular category of the applicator's certification.

The EPA recognizes 10 categories of commercial applicators; however, States, Tribes, or Territories may delete a category not needed, request Administrator's approval of additional major categories, or designate subcategories within these 10 categories, as needed.

To determine the training required and the certification process, the NWS Facility/Work Site Program Coordinator will need to contact the State, Territory, or Tribe. To assist in this process, check the EPA website of State contacts at http://npic.orst.edu/reg/state_agencies.html

16.6.7 Using Hazardous Chemicals

- a. Requirements

All NWS personnel who use manage, or store OSHA-defined hazardous chemicals are required to be trained under the HAZCOM Standard. Procedure 7 in NWSM 50-1115 includes the HAZCOM requirements and includes templates to assist in implementation of the program.

Under the OSHA rules, personnel who work with a hazardous chemical must take training which explains:

- 1) Requirements of the HAZCOM Standard
- 2) Definitions of hazardous chemicals in the workplace
- 3) Locations of Safety Data Sheets (SDS)
- 4) Availability of SDS for employees

The employee training plan will also include an explanation of:

- 1) Methods and observations workers can use to detect the presence or release of a hazardous chemical in the work area (i.e., appearance or odor)
- 2) The physical and health hazards of the chemicals in the workplace
- 3) Measures employees can take to protect themselves from hazards, including the specific work practices and use of personal protective equipment provided by the employer
- 4) How the Hazard Communication Program is implemented in the workplace, how to read and interpret information on labels and SDSs and how employees can obtain and use the available hazard information

For those employers whose work operations involve situations where employees have only a potential to be exposed to hazardous substances (i.e., the handling of containers not intended to be opened under normal conditions), a limited set of requirements must be met.

For example, for NWS employees who only handle sealed containers in a warehouse facility, the training program must ensure that employees are provided with information and training to the extent necessary to protect them in the event of a spill or leak from a sealed container.

b. Retraining

Retraining under the HAZCOM Standard is generally not required unless new chemicals, procedures, or hazards are introduced into the workplace or employee actions demonstrate a lack of understanding of proper chemical handling techniques.

c. Regulatory Citation: 29 CFR 1910.1200

16.6. 8 Storage of Flammable Materials

- a. All NWS personnel who use, store or handle flammable materials need to be trained in the dangers of these materials and the proper management techniques. Toward this end, Procedure 16 in NWSM 50-1115 creates a management program for these materials.

<p>NOTE: While there is no OSHA or EPA requirement to provide a formal training course, best management practices require that employees who use, store or handle these materials be provided an awareness session to ensure they understand the proper management procedures to be used.</p>
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b. Retraining: None required.

c. Regulatory Citation: 29 CFR 1910.106

16.6.9 Response to Spills of Hazardous Materials

As part of the Superfund Amendments and Reauthorization Act of 1986 (SARA), OSHA was directed to establish programs to protect hazardous waste workers. The result of this effort has been termed the HAZWOPER Standards.

a. Regulated Activity

When a hazardous substance is spilled, OSHA has determined the residues from the cleanup are hazardous wastes. Thus, employees responding to a hazardous substance spill are, according to OSHA, also hazardous waste workers who are to be protected. As a result, these workers must comply with the OSHA HAZWOPER rules.

It must be noted that the list of OSHA hazardous substances is much larger than that of either the EPA or DOT. Unlike the EPA or DOT, OSHA has deemed that DOT hazardous materials are also OSHA hazardous substances. Because of this, the regulations apply to an extensive list of materials.

For example, DOT-designated hazardous materials that are deemed OSHA hazardous substances include gasoline, lighter fluid, paint, certain fertilizers, and kerosene. A spill of any of these triggers the HAZWOPER regulations.

It must also be noted that OSHA defines an “emergency response corresponding to

emergencies” as a “response effort by employees from outside the immediate release area by designated responders...to an occurrence which results, or is likely to result in an uncontrolled release of a hazardous substance.”

NOTE: OSHA explains that responses to “individual releases” where the substance “can be absorbed, neutralized or otherwise controlled...by employees in the immediate release area or by maintenance personnel are not emergency responses.” In addition, responses where “there is no potential health or safety hazard” are not emergency releases. For NWS employees who only respond to incidental releases of hazardous materials, First Responder Operations Level training would not be required. Incidental releases are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to employees in the immediate work area or those assigned to clean them up. Procedures for hazardous materials incidental releases are covered in the HAZCOM and SPCC Plans and associated training.

Under the OSHA rule, there are five roles for emergency responders:

- 1) **First Responder - Awareness Level** - is the employee who releases or observes a release and whose role is only to notify “proper authorities.”
- 2) **First Responder - Operations Level** - contains a leak but does not perform an active role in stopping it.
- 3) **Hazardous Materials Technician** - active participant in the response. This individual “plugs or patches or otherwise stops the leak.”
- 4) **Hazardous Materials Specialist** - is an employee with specific knowledge about the released hazardous material who advises the response commander.
- 5) **Incident Commander** - is the employee who assumes control of the response effort.

At most NWS facilities or work sites, NWS employees will serve the role of First Responder - Awareness Level only. Their task is to report the emergency and ensure they and their co-workers are moved away from the danger area. The local response agency (usually the Fire Department) will provide all other response efforts.

Each of these responders requires different amounts and types of training.

First Responder - Awareness Level

The employee who releases or observes a release and notifies “proper authorities” needs training which includes:

- OSHA HAZCOM Standard training
- Use of the DOT Emergency Response Guidebook
- Notification procedures
- Awareness of their role in the response plan

There is no minimum time specified for this training.

NOTE: It is highly suggested that this training be combined with HAZCOM training, thus meeting two requirements simultaneously.

First Responder - Operations Level

The employee who responds to a release and contains it or keeps it from spreading (but does not try to stop it) is given the title “First Responder - Operations Level.” These employees must receive 8 hours of instruction which includes:

- Hazard and risk assessment
- Personal protective equipment
- Hazardous material terms
- Control and containment techniques
- Decontamination
- Standard operating procedures

NOTE: OSHA allows an alternative to this training. If the employer certifies that the employee “has sufficient experience to objectively demonstrate competency” in the areas identified for the First Responder - Operations Level as well as those for the First Responder Awareness Level, the training is unnecessary.

Should these employees be involved in the post incident clean-up, the employer must ensure the following additional requirements are also met:

- §1910.38(a) which requires an emergency action plan and fire prevention plan
- §1910.143 which details respiratory protection
- §1910.1200 which details the hazard communication program

b. Retraining is required as follows:

For all Emergency Responders, retraining is required such that it is sufficient to maintain competency.

c. Regulatory Citation: 29 CFR 1910.120(q)

16.6.10 Underground Storage Tanks Management

a. Regulated Activity

NWS facilities that use a UST to store a petroleum product are required to ensure the tank and its related equipment are properly maintained so as to prevent and/or respond to releases to the environment. Although there is no formal requirement to provide employee training, in order to ensure the UST requirements are met, best management practices recommend that it is provided.

b. Required Training

NWS employees who use and/or maintain the tank must undergo training to ensure they understand:

- 1) Use and maintenance of the release detection system
- 2) Response to releases

- 3) Spill and overfill protection
 - 4) Use and maintenance of the corrosion protection system
 - 5) Inspection techniques.
- c. Retraining: No formal requirement, however, an annual refresher is recommended.
 - d. Regulatory Citation: No specific training requirement, however, the UST standards are defined in 40 CFR Part 280.

16.6.11 DOT Hazardous Material Employee Training

The DOT requires HAZMAT employers to train their HAZMAT employees. According to the DOT, a HAZMAT employee is a person who “in the course of employment, affects hazardous materials safety.” The term includes persons who:

- Load, unload or handle hazardous materials
- Test, recondition, repair, modify, mark or otherwise represent containers, drums or packages as qualified for use for hazardous materials
- Prepare hazardous materials for transportation
- Are responsible for safety of hazardous materials transportation
- Operate a vehicle used to transport hazardous materials.

NWS personnel typically perform the tasks described in items 1, 3, and 4 above and hence, the DOT requires them to receive information to do these tasks correctly.

Required Training:

The DOT-required training consists of four categories. The first three apply to all modes of transportation while the fourth applies only to highway transportation and motor vehicle operators. The employer must certify that employees received the training and were tested on their appropriate areas of responsibility. New employees, or those who change jobs, must receive their training within 90-days of employment or change.

The four categories are:

a. General Awareness/Familiarization Training

The intent of the training is to provide recognition of hazardous materials through familiarization with the DOT rules. This training includes instruction in the DOT hazardous material communication system including the DOT hazard classes and the marking, labeling and placarding requirements. This training is required by all employees who are involved with DOT hazardous materials in any way. It provides the basis for understanding the DOT system.

b. Function - Specific Training

This is the job-specific training concerning the DOT requirements that each employee must receive in order to properly perform their duties. By nature, this is both site- and job-specific and includes NWS personnel who handle, load, unload, package or even sign the shipping papers or manifest.

c. Safety Training

This category includes:

- 1) Emergency response training
- 2) Personnel protective equipment and measures to protect employees from associated hazards
- 3) Methods and procedures to prevent accidents

This training is to ensure personnel understand what to do in an emergency including how to respond to accidents involving the DOT HAZMAT they handle.

d. Security Awareness Training

The DOT requires each “hazmat employee,” that is, “anyone who in the course of employment directly affects hazardous materials transportation safety,” to receive training in accord with 49 CFR 172.702. While this training is primarily directed at the drivers of vehicles that transport the hazardous materials, it is also required for those individuals who “unload or handle hazardous materials, or prepares hazardous materials for transportation” and thus involves the NWS Environmental Focal Point.

The training should include:

- 1) An awareness of the security risks associated with the hazardous materials and the methods designed to enhance transportation security (i.e. how to recognize and respond to possible security threats)
- 2) In-depth security training in the facility’s security plan (if applicable).

e. Driver Training

This training is only required of drivers of motor vehicles used to transport commercial quantities of hazardous materials. Because NWS employees do not transport commercial quantities of DOT Hazardous Materials, it is unlikely that this training will be required. (This information is included for educational purposes).

For drivers, the training includes:

- 1) Pre-trip safety inspection
- 2) Use of vehicle controls and equipment including emergency equipment
- 3) Operation of the vehicle
- 4) Procedures to navigate tunnels, bridges and railroad crossings
- 5) Requirements for attendance of vehicles, parking, smoking, routing, incident reporting
- 6) Loading and unloading including compatibility, handling and securing the load

Drivers who operate cargo tanks or a portable tank over 1,000 gallons in capacity must have the following specialized training in:

- 1) Operation of emergency controls on the tank
- 2) Special vehicle handling characteristics
- 3) Loading and unloading

- 4) Properties and hazards of materials transportation
- 5) Retesting and inspection requirements

Special Note: The DOT allows that training done under the OSHA HAZCOM and HAZWOPER requirements of 29 CFR 1910.20 and 29 CFR 1910.1200 as well as the EPA HAZWASTE training required by 40 CFR 311.1 fulfill this training requirement.

f. Retraining and Recordkeeping

1) Retraining required: recurrent every three years.

2) Records Required:

- Certification by employer
- Training record that includes:
 - The employee name
 - The most recent training completion date
 - A description of the training materials or the location in which the copy is stored
 - The name and address of the trainer
 - The certification of training and testing

Records must be kept during the employment term plus 90 days after for each employee who completes the training.

g. Regulatory Citation: 49 CFR 172 Subpart H

16.7 Responsibilities

16.7.1 NWS Headquarters

- a. The NWSH Environmental/Safety Office will provide assistance to Regional Headquarters, Operating Unit, and field personnel to ensure that NWS facilities comply with requirements of this section.
- b. NWSH will coordinate with SECO, as necessary, regarding compliance issues related to this section.

16.7.2 Regional or Operating Unit Environmental/Safety Coordinator

- a. Will monitor and promote compliance with the requirements of this section at the regional headquarters or Operating Unit facilities.
- b. Will identify training opportunities to field offices when available and assist in implementation.
- c. Will ensure that appropriate training program procedures are developed at regional headquarters or operating unit facilities.
- d. Will ensure that all training records are included in a transfer package when an employee is transferred to another location within the NWS.

16.7.3 Station Manager

- a. Will have oversight over the implementation of this section and ensure that the requirements of this section are followed by individuals at the NWS facility.
- b. Will ensure sufficient personnel and funding are available to enable compliance with all applicable requirements of this section.
- c. Will ensure that training programs are developed at NWS field offices and implemented for environmental and worker safety programs, as applicable.
- d. Will ensure that all NWS facility/work site personnel have received the training required to properly perform their duties in accord with environmental/worker health and safety requirements.
- e. Will review or delegate review of this section on an annual basis to ensure that the facility is complying with its requirements. Confirmation of this review will be forwarded to the Regional or Operating Unit Environmental/Safety Coordinator.

16.7.4 Environmental or Environmental/Safety Focal Point or Designated Person

- a. Will ensure any tasks delegated to them by the Station Manager are implemented in accordance with the requirements of this section.
- b. Will determine training requirements for facility/work site personnel.
- c. Will implement required training.
- d. Will maintain training records.

16.7.5 Employees

Individual employees affected by this section are required to participate in training required by this section and adopt the lessons learned into performance of their jobs.

16.8 References

Incorporated References

The following list of references is incorporated as a whole or in part into this section. These references can provide additional explanation or guidance for the implementation of this section.

U.S. Department of Labor Occupational Safety and Health Agency

29 CFR 1910.106	Flammable and combustible liquids
29 CFR 1910.120	Hazardous waste operations and emergency response
(p)	Certain operations conducted under the Resource Conservation and Recovery Act of 1976 (RCRA)
(p) (8)	Emergency Response Program
(p) (8) (iii)	Training
(q)	Emergency response to hazardous substance releases
29 CFR 1910.132	Personal Protective Equipment
29 CFR 1910.146	Permit required confined space

29 CFR 1910.1200	Hazard Communication Standard
29 CFR 1926.62	Lead
(1)	Employee information and training
(2)	Training Program
29 CFR 1910.1101	Asbestos
(k)	Communication of hazards
(k) (9)	Employee information and training

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U.S. Environmental Protection Agency

40 CFR 82	Protection of Stratospheric Ozone
.40	Technicians Training and Certification
.161	Technician Certification
40 CFR 112	.7 Guidelines for the Preparation and Implementation of a Spill Prevention Control and Countermeasure Plan
(e)(10)	Personnel, Training and Spill Prevention Procedures
40 CFR 265	Interim Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
.16	Personnel training
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
.34	Accumulation Time
40 CFR 280	Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (USTs)
40 CFR 475	Lead-Based Paint Poisoning Prevention in Certain Residential Structures
.107	Disclosure requirements for Sellers and Lessors
.220-239	Lead-Based Paint Activities
40 CFR 763	Subpart E Asbestos-Containing Materials in Schools
(a)	Training and Periodic Surveillance
(a)(2)	Training for Custodial Staff
Appendix C	Asbestos Model Accreditation Plan